Configuring Cisco MCU and TelePresence Server

Revised: April 2013

Note You must be running MCU software release 4.4 or a later or TelePresence Server 3.0 or later to use Cisco WebEx Enabled TelePresence features.

Contents

This chapter describes how to configure MCU and TelePresence Server for Cisco WebEx Enabled TelePresence meetings. It contains the following sections:

Introduction

This chapter describes specific settings on both MCU and TelePresence Server that are required or recommended for use with Cisco WebEx Enabled TelePresence meetings.

In terms of deployment, both MCU and TelePresence Server must be registered to VCS directly and cannot be trunked to Unified CM.

In terms of user experience, the active speaker from TelePresence to MCU or TelePresence Server is shown to WebEx users and the active speaker from WebEx to MCU or TelePresence Server is shown to TelePresence. TelePresence Server, by default, using a feature called ActivePresence, displays a full screen view of the active speaker and up to nine additional TelePresence participants in a row at the bottom of the screen. MCU, by default displays a full screen view of the active speaker. For more information about the screen layout options available, refer to the TelePresence Server and MCU documentation.

Required Settings for MCU

The following settings on MCU are required for Cisco WebEx Enabled TelePresence:

For more information about MCU software, refer to the following link:

http://www.cisco.com/en/US/products/ps12283/prod_release_notes_list.html

SIP

MCU calls to WebEx support SIP only. Make sure SIP is configured correctly on MCU. The call leg between MCU/TelePresence Server, VCS Control, VCS Expressway and the WebEx cloud cannot be interworked.

> **Note**   Refer to MCU help for more information on how to configure SIP.

Content Mode

In Hybrid mode, the incoming content stream is passed through, giving the best possible quality to HD endpoints and it is also decoded and used to create a second, lower resolution stream for anyone who cannot receive the passthrough stream (SD endpoints). This uses up a video port but ensures that users get the advantages both of transcoding and passthrough.

If content mode is set to Passthrough, a single video stream is sent to everyone in the meeting. If all participants are HD endpoints, they receive the best possible quality. However, if one or more participants can only receive SD video, then all participants receive SD video.

Though Content Mode can be set on the MCU, Cisco recommends customers to set it using TMS.

To configure hybrid content mode for MCU in TMS, refer to:

Configuring Hybrid Content Mode for MCU in Cisco TMS, page 6-8.

Video and Audio Codecs

WebEx requires H.264 for video and content and G.711 for audio.

To set video and audio codecs in MCU, do the following:

Step 1   Log into the MCU.

Step 2   Click **Settings**.

Step 3   The Settings page appears with the Conferences tab displayed.

Step 4   In the Advanced Settings section make sure **H.264** is checked for the following:

- Video codecs from MCU

• Video codecs to MCU

Step 5 In the Advanced Settings section make sure **G.711** is checked for the following:

• Audio codecs from MCU

• Audio codecs to MCU

Step 6 At the bottom of the page, click **Apply changes**.

Automatic Content Handover

This feature must be enabled for TelePresence endpoints to share during a Cisco WebEx Enabled TelePresence meeting.

To enable Automatic Content Handover in MCU, do the following:

Step 1 Log into the MCU.

Step 2 Click **Settings**.

Step 3 The Settings page appears with the Conferences tab displayed.

Step 4 Click the **Content** tab.

Step 5 For Automatic content handover, select **Enabled**.

Step 6 At the bottom of the page, click **Apply changes**.

Recommended Settings for MCU

For best results with Cisco WebEx Enabled TelePresence, Cisco recommends configuring the following settings in MCU:

Automatically Make Content Channel Important

Cisco recommends setting the conference settings to automatically make the content channel important. Any new content channel in a conference will be treated as important and displayed prominently to all participants who see the content channel in their conference layout.

To enable automatically making the content channel important, do the following:

Step 1 Log into the MCU.

Step 2   Click **Settings**.

The Settings page appears with the Conferences tab displayed.

Step 3   In the Advanced Settings section, check **Automatically make content channel important**.

Step 4   At the bottom of the page, click **Apply changes**.

Outgoing Transcoded Codec

Cisco recommends setting the outgoing transcoded codec to H.264. This makes the MCU use the H.264 video codec for outgoing transcoded content channels.

To set the outgoing transcoded codec to H.264, do the following:

Step 1   Log into the MCU.

Step 2   Click **Conferences** at the top of the page.

The Conferences page appears with the Conference list tab displayed.

Step 3   Click the **Templates** tab.

The Conference Templates page appears.

Step 4   Click the link for **Top level**.

The Top level template configuration page appears.

Step 5   In the Content section, using the Outgoing transcoded codec menu, select **H.264**.

Step 6   At the bottom of the page, click **Apply changes**.

Adaptive Gain Control

Cisco recommends setting adaptive gain control on join to be enabled. Adaptive Gain Control (AGC) alters the gain of each participant's audio so that all participants have a consistent volume level.

To set the adaptive gain control on join to be enabled, do the following:

Step 1   Log into the MCU.

Step 2   Click **Conferences** at the top of the page.

The Conferences page appears with the Conference list tab displayed.

Step 3   Click the **Templates** tab.

The Conference Templates page appears.

Step 4   Click the link for **Top level**.

The Top level template configuration page appears.

Step 5   In the Parameters section, using the Adaptive Gain Control on join menu, select **Enabled**.

Step 6   At the bottom of the page, click **Apply changes**.

Join and Leave Audio Notifications

This setting controls different aspects of sounds that can occur during a meeting. One setting to be aware of for Cisco WebEx Enabled TelePresence meetings is Join and Leave Notifications, which are audible messages indicating when other participants join and leave the meeting. By default, these are enabled (checked).

WebEx also has join and leave notifications that are independent of those set in MCU. If the notifications are enabled on both MCU and WebEx, notifications will be heard for each participant joining and leaving the meeting on the MCU side and for participants on the WebEx side. As a result, you may want to disable the join and leaving notifications in MCU and/or WebEx.

To disable the join and leave audio notifications in MCU, do the following:

Step 1   Log into the MCU.

Step 2   Click **Settings**.

The Settings page appears with the Conferences tab displayed.

Step 3   In the Conference Settings section, for Audio Notifications, uncheck **Join and leave indications**.

Step 4   At the bottom of the page, click **Apply changes**.

Encryption

Cisco recommends that on MCUs with an encryption key, that the conference settings are configured to optionally encrypt the media. If encryption is set to require encryption of all media, then the main and content video sent to WebEx will be merged into a single stream and treated as a participant.

To set encryption to optional, do the following:

Step 1   Log into the MCU.

Step 2   Click **Conferences** at the top of the page.

The Conferences page appears with the Conference list tab displayed.

Step 3   Click the **Templates** tab.

The Conference Templates page appears.

Step 4   Click the link for **Top level**.

The Top level template configuration page appears.

Step 5   In the Parameters section, using the Encryption menu, select **Optional**.

Step 6   At the bottom of the page, click **Apply changes**.

Required Settings for TelePresence Server

The following setting in TelePresence Server is required for Cisco WebEx Enabled TelePresence:

- SIP, page 3-6

- Locally Managed Mode, page 3-6
- Automatic Content Handover, page 3-6

For more information about TelePresence Server software, refer to the following link:

http://www.cisco.com/en/US/products/ps11339/prod_release_notes_list.html

SIP

TelePresence Server calls to WebEx support SIP only. Make sure SIP is configured correctly on TelePresence Server.

Note   Refer to the TelePresence Server help for more information on how to configure SIP.

Locally Managed Mode

For TMS to control the TelePresence Server, the TelePresence Server must be set in locally managed mode. To set the operation mode, do the following.

To enable locally managed mode in TelePresence Server, do the following:

Step 1   Log into the TelePresence Server.

Step 2   Go to **Configuration** > **Operation mode**.

The Operation mode page appears.

Step 3   Using the Operation mode menu, select **Locally managed**.

Step 4   At the bottom of the page, click **Apply changes**.

Automatic Content Handover

This feature must be enabled for TelePresence endpoints to share during a Cisco WebEx Enabled TelePresence meeting.

To enable Automatic Content Handover in TelePresence Server, do the following:

Step 1   Log into the TelePresence Server.

Step 2   Go to **Configuration** > **System Settings**.

The System Settings page appears.

Step 3   Make sure **Automatic content handover** is checked.

Step 4   At the bottom of the page, click **Apply changes**.

Recommended Settings for TelePresence Server

For best results with Cisco WebEx Enabled TelePresence, Cisco recommends the following settings on TelePresence Server:

Display Setting

Cisco recommends the display setting in TelePresence Server to be set to full screen, so that Webex video can be shown full size on a multiscreen endpoint.

To enable full screen display in TelePresence Server, do the following:

Step 1   Log into TelePresence Server.

Step 2   Go to **Configuration** > **Default Endpoint Settings**.

Step 3   In the Display section, for Full screen view of single-screen endpoints, select **Allowed**.

Step 4   At the bottom of the page, click **Apply changes**.